In the Claims:

19. (New) The rotary position measuring system in accordance with claim 1, wherein the measuring graduation structure is radially symmetrically arranged around the axis of symmetry.

REMARKS

A. 35 U.S.C. § 112, Second Paragraph

In the Office Action mailed on May 28, 2002, claim 2 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in meaning for omitting essential structural limitations regarding the apparatus being "oscillation insensitive." Applicants traverse this rejection. First, there has been no showing that claim 2 is indefinite in meaning. Since one of ordinary skill would understand the meaning of the invention claimed, the rejection of claim 2 is improper and should be withdrawn.

The rejection is traversed for the additional reason that the omission of essential elements is not a basis for rejection under 35 U.S.C. § 112, second paragraph. MPEP § 2172.01. Such an omission may be a basis for a rejection under 35 U.S.C. § 112, first paragraph. MPEP § 2172.01. If the latter rejection was intended, then it is improper as well. The rejection asserts that claim 2 should recite further structure that would render the claimed housing oscillation insensitive. Applicants disagree. One of ordinary skill would be able to make the recited housing oscillation insensitive. Applicants' specification describes an embodiment of a housing 1 shown in FIG. 1 that is cylindrical (Page 7, line 7) and has walls of a sufficient thickness that allows the plate 8 to be oscillation free (Page 8, lines 12-16). One of ordinary skill in the art would be able to make

the recited housing oscillation insensitive based on Applicants' disclosure of the housing 1 and the state of the art for preventing such oscillations. Accordingly, the invention of claim 2 is enabled and so the rejection is improper and should be withdrawn.

B. 35 U.S.C. § 102

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Kaul et al. Applicants traverse this rejection for several reasons. First, the rejection fails to recite each and every element in Kaul et al. that is being relied on to reject the claims. This leaves it to the Applicants to guess the basis for the rejection. Since this is unfair to the Applicants, Applicants demand that a complete analysis for the rejection be given in the next Office Action should the rejection be repeated. If no such analysis is given, then Applicants will take that as an admission that Kaul et al. does not anticipate the claims.

A review of Kaul et al. reveals that Kaul et al. fails to disclose multiple elements recited in claim 1. For example, Kaul et al. fails to disclose "a scanning unit connected to a housing." Kaul et al. fails to disclose any attachment between a scanning unit and a housing. Indeed, Kaul et al. fails to disclose a housing.

Kaul et al. fails to disclose "a reflection scanning graduation structure arranged directly on the housing." Kaul et al. fails to disclose arranging a graduation on a housing. As mentioned above, Kaul et al. fails to disclose a housing.

Kaul et al. also fails to disclose a graduation disk "arranged rotatable around an axis of symmetry in the housing." Kaul et al. fails to disclose a rotatable graduation disk and a housing.

Since Kaul et al. fails to disclose numerous elements recited in claim 1, claim 1 is not anticipated by Kaul et al. Thus, the rejection is improper and should be withdrawn.

Besides not being anticipated by Kaul et al., claim 1 is not rendered obvious by Kaul et al because there is no suggestion in Kaul et al. or the prior art alter Kaul et al.'s device so that either 1) a scanning unit is connected to a housing, 2) a reflection scanning graduation structure is arranged directly on a housing or 3) a graduation disk is arranged rotatable around an axis of symmetry in a housing. Without such suggestion, claim 1 should be deemed patentable over Kaul et al.

C. **35 U.S.C. § 103**

Claims 1-18 were rejected under 35 U.S.C. § 103 as being obvious in view of Huber. In particular, the rejection states that it would have been obvious to adapt Huber's linear position measuring system to a rotary configuration. Applicants traverse this rejection for various reasons. First, the rejection asserts that the only difference between the claimed invention and Huber's disclosure is that Huber discloses a linear measuring system. This assertion is incorrect and ignores that there are various other differences between the claimed invention and the disclosure of Huber. For example, claim 1 recites a housing and Huber is silent as to having a housing. It follows that Huber fails to disclose a scanning unit that is connected with a housing as recited in claim 1. This failure is evident even if components 1, L, D0, D1, D2 and K of Huber are deemed a scanning unit. Since there is no suggestion in Huber or the prior art to alter Huber to have a scanning unit attached to a housing, the rejection is improper and should be withdrawn.

The rejection of claim 1 is also improper because Huber does not disclose or suggest a reflection scanning graduation arranged directly on a housing. Besides not disclosing or suggesting arranging a scanning graduation directly on a housing, Huber does not disclose a

reflection scanning graduation. Instead, Huber's graduation 1 is a transmission type graduation. Since there is no suggestion for Huber to either arrange a scanning graduation directly on a housing or use a reflection scanning graduation. Without such suggestion the rejection is improper and should be withdrawn.

The rejection of claim 1 is improper for the additional reason that Huber does not disclose or suggest positioning a measuring graduation structure between a scanning unit and a scanning graduation structure. As mentioned above, Huber does not explicitly recite a scanning unit. Faced with this, it appears that at the least components 1, K, L and D0, D1 and D2 could be arguably a scanning unit. With this interpretation in mind, Huber's graduation 2, which arguably is a measuring graduation, is not located between the scanning unit and a reflection scanning graduation structure. Since there is no suggestion in Huber or the prior art to reconfigure Huber to have such a structure, the rejection is improper and should be withdrawn.

The rejection of claim 1 is also improper because Huber does not disclose or suggest having the light emitted by the light source first reach the measuring graduation structure. As shown in FIG. 2 of Huber the light from light source L first reaches the scanning graduation 1. Since there is no suggestion in Huber or the prior art to alter Huber so that the light first reaches graduation 2, the rejection is improper and should be withdrawn.

In summary, the rejection of claim 1 is improper because the Office Action has failed to provide a prima facie case showing that the numerous differences between the claimed invention and Huber noted above would have been obvious to one of ordinary skill in the art. Indeed, the Office Action has only stated that "it is notoriously well-known to one of ordinary skill in the art to move a grating relative to another grating to measure position, and to adapt a linear

configuration to a rotary/disk configuration." The Office Action's statement is silent as to using a housing, connecting a scanning unit to a housing, using a reflection scanning graduation that is arranged directly on a housing and having light first reach a measuring graduation. This silence is easily explained. The Office Action is using improper hindsight and Applicants' own disclosure to improperly reject the claims. Accordingly, the rejection should be withdrawn.

A further sign that improper hindsight is being used to reject the claims is seen by reviewing the rejections of the dependent claims. For example, claim 2 recites that the housing is oscillation insensitive. The Office Action has provided no motivation for using such a housing and so the rejection of claim 2 is improper.

The rejections of claims 3-12 and 18 are also improper. These claims recite various ways to fasten a scanning graduation to a housing (claims 3-5) or arranging the scanning graduation with a housing (claims 6-12 and 17-18). The Office Action has provided no motivation for the recited ways of fastening and arranging the scanning graduation, so the rejections of claims 3-12 and 17-18 are improper.

The rejections of claims 14-16 are improper. These claims recite a particular bar height for the measuring graduation. The Office Action has provided no motivation for using the recited bar height in a measuring graduation, so the rejections of claims 14-16 are improper.

D. New Claim 19

New claim 19 depends directly on claim 1 and so is patentable for at least the same reasons given above in Sections B and C. In addition, claim 19 recites that the measuring graduation structure is radially symmetrically arranged around the axis of symmetry. Since neither Kaul et al. nor Huber suggest such a measuring graduation structure, claim 19 should be

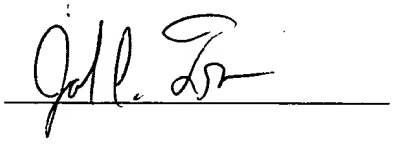
deemed patentable over Kaul et al and Huber.

Please note that new claim 19 is being presented to provide additional protection for a rotary position measuring system and so is not being presented for reasons of patentability as defined in Festo Corporation v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., 234 F.3d 558, 56 USPQ2d 1865 (Fed. Cir. 2000).

CONCLUSION

In view of the arguments above, Applicants respectfully submit that all of the pending claims 1-19 are in condition for allowance and seek an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next Office Action and believes that an interview would be helpful to resolve any remaining issues, he is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,



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